What is claimed is:

1. An apparatus, comprising:

an optical transport for receiving an electromagnetic wave having a first property; and

a transport influencer, operatively coupled to said optical transport, for affecting a second property of said transport, wherein said second property influences said first property of said wave.

2. The apparatus of claim 1 wherein said first property is a polarization plane and said second property is a magnetic field in said transport.

3. The apparatus of claim 1 wherein said influencer produces a controllable magnetic field parallel to a propagation direction of said wave through said transport.

4. The apparatus of claim 2 wherein said influencer produces a controllable magnetic field parallel to a propagation direction of said wave through said transport to alter said polarization plane of said wave.

5. The apparatus of claim 2 wherein said influencer alters said polarization plane by changing a rotation angle of at least one component of said polarization plane in a range from about zero degrees to about ninety degrees.

6. The apparatus of claim 1 wherein said transport is a fiber waveguide including a core and a cladding and wherein said influencer includes a magnetic material proximate said cladding.

7. The apparatus of claim 6 wherein said magnetic material includes permanent magnetic material.

8. The apparatus of claim 6 wherein said magnetic material is selectively magnetized responsive to an electric current.

9. The apparatus of claim 6 wherein said magnetic material is integrated into said fiber waveguide.

10. An apparatus, comprising:

an optical transport for receiving an electromagnetic wave having one of a right hand circular polarization or a left hand circular polarization; and

a transport influencer, operatively coupled to said optical transport, for controllably affecting a magnetic field of said transport to change a polarization angle of said wave.

11. The apparatus of claim 10 wherein said influencer changes a polarization angle over a range of about zero degrees to about ninety degrees.

12. The apparatus of claim 10 wherein said influencer produces a controllable magnetic field parallel to a propagation direction of said wave through said transport to alter said polarization angle.

13. The apparatus of claim 11 wherein said influencer is responsive to a control signal for changing said polarization angle.

14. The apparatus of claim 12 wherein said influencer is responsive to a control signal for changing said polarization angle.

15. The apparatus of claim 11 wherein said influencer alters said polarization angle over a range from about zero degrees to about ninety degrees.

16. The apparatus of claim 12 wherein said influencer alters said polarization angle over a range from about zero degrees to about ninety degrees.

17. The apparatus of claim 10 wherein said transport is a fiber waveguide including a core and a cladding and wherein said influencer includes a magnetic material proximate said cladding.

18. The apparatus of claim 6 wherein said magnetic material includes permanent magnetic material.

19. The apparatus of claim 6 wherein said magnetic material is selectively magnetized responsive to an electric current.

20. The apparatus of claim 6 wherein said magnetic material is integrated into said fiber waveguide.

21. A method, comprising:

receiving an electromagnetic wave having a first property at an optical transport; and

affecting a second property of said transport using a transport influencer coupled to said optical transport, wherein said second property influences said first property of said wave.

22. The method of claim 21 wherein said first property is a polarization plane and said second property is a magnetic field in said transport.

23. The method of claim 21 wherein said influencer produces a controllable magnetic field parallel to a propagation direction of said wave through said transport.

24. The method of claim 22 wherein said influencer produces a controllable magnetic field parallel to a propagation direction of said wave through said transport to alter said polarization plane of said wave.

25. The method of claim 22 wherein said influencer alters said polarization plane by changing a rotation angle of at least one component of said polarization plane in a range from about zero degrees to about ninety degrees.

26. The method of claim 21 wherein said transport is a fiber waveguide including a core and a cladding and wherein said influencer includes a magnetic material proximate said cladding.

27. The method of claim 26 wherein said magnetic material includes permanent magnetic material.

28. The method of claim 26 wherein said magnetic material is selectively magnetized responsive to an electric current.

29. The method of claim 26 wherein said magnetic material is integrated into said fiber waveguide.

30. An apparatus, comprising:

means for receiving an electromagnetic wave having a first property at an optical transport; and

means, operatively coupled to said receiving means, for affecting a second property of said transport using a transport influencer coupled to said optical transport, wherein said second property influences said first property of said wave.

31. The apparatus of claim 30 wherein said first property is a polarization plane and said second property is a magnetic field in said transport.

32. The apparatus of claim 30 wherein said influencer produces a controllable magnetic field parallel to a propagation direction of said wave through said transport.

33. The apparatus of claim 31 wherein said influencer produces a controllable magnetic field parallel to a propagation direction of said wave through said transport to alter said polarization plane of said wave.

34. The apparatus of claim 31 wherein said influencer alters said polarization plane by changing a rotation angle of at least one component of said polarization plane in a range from about zero degrees to about ninety degrees.

35. The apparatus of claim 30 wherein said transport is a fiber waveguide including a core and a cladding and wherein said influencer includes a magnetic material proximate said cladding.

36. The apparatus of claim 35 wherein said magnetic material includes permanent magnetic material.

37. The apparatus of claim 35 wherein said magnetic material is selectively magnetized responsive to an electric current.

38. The apparatus of claim 35 wherein said magnetic material is integrated into said fiber waveguide.